

In the Claims:

1. An adjustable disc spring system comprising:
at least one beveled disc spring axially aligned with an adjustable spacer;
wherein said adjustable spacer is compressible in a substantially axial
direction relative to said at least one beveled disc spring.
2. The system of claim 1 wherein said adjustable spacer comprises at least
one entrapping flange to receive said at least one beveled disc spring.
3. The system of claim 2 wherein said at least one entrapping flange
comprises at least one curved surface concave to said at least one beveled of disc spring.
4. The system of claim 3 wherein said spacer comprises at least one
curved compressible portion between said at least one entrapping flange.
5. The system of claim 2 wherein said at least one beveled disc spring
comprises an offset for receiving said at least one entrapping flange.
6. The system of claim 5 wherein said offset comprises a tapered portion of
said at least one beveled disc spring toward said at least one entrapping flange.
7. The system of claim 1 wherein said at least one beveled disc spring
comprises an axially protruding tip.
8. The system of claim 1 wherein said at least one beveled disc spring
comprises a conical shaped disc.

9. The system of claim 1 wherein said at least one beveled disc spring comprises a Belleville washer.

10. The system of claim 1 wherein said at least one beveled disc spring comprises a straight radial extension for receiving a radially interior force.

11. The system of claim 10 wherein said straight radial extension is substantially parallel to a second straight radial extension of a second beveled disc spring.

12. The system of claim 1 wherein said at least one beveled disc spring further comprises a deflection limiting stop to inhibit an end of said adjustable spacer from moving radially past said deflection limiting stop.

13. The system of claim 1 wherein said at least one beveled disc spring comprises a proximal end connected to said adjustable spacer and a distal end adapted to engage a surface.

14. The system of claim 13 wherein said distal end is adapted to seal with said surface.

15. The system of claim 1 further comprising a connecting member for connecting said at least one beveled disc spring to a second beveled disc spring wherein a proximal end of said at least one beveled disc spring is connected to said adjustable spacer and a distal end of at least one beveled disc spring is connected to said second beveled disc spring via said connecting member.

16. An adjustable spring system comprising:
a plurality of beveled disc springs axially aligned with an adjustable spacer;
wherein said adjustable spacer is compressible in a substantially axial direction relative to said plurality of beveled disc springs.
17. The system of claim 15 wherein said adjustable spacer comprises a plurality of entrapping flanges to receive said plurality of beveled disc springs.
18. The system of claim 16 further comprising connecting member for connecting at least one beveled disc spring of said plurality of beveled disc springs to a second beveled disc spring of a second plurality of beveled disc springs wherein a proximal end of said at least one beveled disc spring is connected to said adjustable spacer and a distal end of said at least one beveled disc spring opposite said spacer is connected to said second beveled disc spring via said connecting member.
19. The system of claim 18 wherein said connecting member comprises a curved connector having an opening for receiving said at least one beveled disc spring and said second beveled disc spring.
20. The system of claim 18 wherein said connecting member comprises a connecting washer.
21. The system of claim 20 wherein said connecting washer comprises a connecting disc spring having a plurality of receiving ports to receive a plurality of disc springs to operatively connect said plurality of disc springs to each other.
22. The system of claim 21 wherein said plurality of receiving ports are adapted to inhibit movement of said plurality of disc springs in an axial direction.

23. The system of claim 16 wherein at least one beveled disc spring of said plurality of beveled disc springs is connected on a first end to a second beveled disc spring of a second plurality of beveled disc springs via said adjustable spacer and said at least one beveled disc spring is connected on a second end to a third beveled disc spring via a second adjustable spacer.

24. The system of claim 16 wherein said plurality of beveled disc springs comprises a plurality of proximal ends connected to said adjustable spacer and a plurality of distal ends adapted to engage a surface.

25. The system of claim 24 wherein said plurality of distal ends are adapted to seal with said surface.

26. The system of claim 16 wherein at least one beveled disc spring of said plurality of disc springs is adapted to engage a second beveled disc spring of a second plurality of beveled disc springs.

27. The system of claim 26 wherein said at least one beveled disc spring comprises a lip for receiving said second beveled disc spring.

28. The system of claim 16 wherein said plurality of beveled disc springs comprises a plurality of Belleville washers.

29. A method of adjusting a disc spring system comprising:
axially aligning at least one beveled disc spring with an adjustable spacer; and
compressing the adjustable spacer in a substantially axial direction relative to said at least one beveled disc spring.

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30. The method of claim 29 further comprising inserting the at least one beveled disc spring into at least one entrapping flange of the adjustable spacer.

31. The method of claim 29 wherein the compressing the adjustable spacer comprises placing an axial force on the at least one beveled disc spring

32. The method of claim 29 wherein the at least one beveled disc spring comprises at least one Belleville washer.

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